## This Page Is Inserted by IFW Operations and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

## IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

## Remarks/Arguments:

Reconsideration of the application is requested.

Claims 1 to 22 are now in the application. Claims 17 to 22 have been added.

On page 2 of the above-identified Office action, claims 1 to 3, 10, 15, and 16 have been rejected as being fully anticipated by Guaraldi et al. (U.S. 5,027,705; hereinafter "Guaraldi") under 35 U.S.C. § 102.

The rejection has been noted and the claims have been amended in an effort to even more clearly define the invention of the instant application.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1, as amended, calls for, inter alia, a rotatable body for printing machines, the rotatable body including:

a circumferential surface provided with a surface structure and formed of a <u>nonmetallic material</u>, the circumferential surface carrying a liquid and being a roller selected from the group of rollers consisting of a <u>slip roller</u> and a <u>ductor roller</u>.

Similarly, claim 10 calls for, *inter alia*, a printing machine comprising:

at least one roller with a circumferential surface provided with a surface structure and formed of a nonmetallic material, the circumferential surface carrying a liquid, and the roller being selected from the group of rollers consisting of a slip roller and a ductor roller.

Claims 15 and 16 are similar to claims 1 and 10, respectively, but further provide that the ductor roller is a <u>ductor</u> roller for <u>periodically contacting</u> another roller -- a definition that is consistent with that known in the art.

In the rejections under section 102 and on page 4 of the Office action, the Examiner refers to two rollers mentioned in Guaraldi, specifically, a slip roller 16 and a roller 20. The Examiner refers to the latter as a "vibrator" roller. The Examiner admits on page 2 of the May 7, 2002 Office action that the "roller [20] is in permanent engagement (FIG. 1) with two other rollers." Emphasis added by applicants. Therefore, one having ordinary skill in the art would know that Guaraldi

vibrator roller 20 is not a roller that <u>periodically</u> enters into contact with another roller.

To even more clearly define the type of roller envisioned by the invention and to set this forth in the independent claims, applicants have changed the word "vibrator" in the independent claims to "ductor," a word that is known to one having ordinary skill in the art to be a roller that periodically comes into contact with another roller (see, i.e., page 5, line 24, to page 6, line 19, as well as page 8, lines 22 to 24, of the specification of the instant application). Guaraldi clearly does not disclose or suggest the ductor roller of claims 1, 10, 15, or 16.

To support this assertion, applicants previously submitted a declaration from Mr. Glenn A. Guaraldi, the first-named inventor of U.S. Patent No. 5,027,705 to Guaraldi et al.

Therein, Mr. Guaraldi confirmed that the term "ductor roller" is conventionally used in the printing industry as a characterization of a roller that periodically contacts another roller(s), that the roller labeled with reference numeral 20 in U.S. Patent No. 5,027,705 to Guaraldi et al.

does not periodically contact another roller, and that Guaraldi does not disclose or suggest a ductor roller.

Due to the above clarification, one having ordinary skill in the art would know that the vibrator roller 20 in Guaraldi cannot be compared to the ductor roller set forth in claims 1, 10, 15, and 16 of the instant application. As such, the ductor roller of the instant application cannot be equated with the Guaraldi roller 20. Therefore, the rejection of the independent claims under Section 102 is now moot.

With regard to the last argument on the last four lines on page 4 of the final Office action (where the feature of the roller "transferring liquid to the other rollers" is mentioned), it must be noted that that claims 1, 10, 15, and 16 specifically provide that the at least one roller has "a circumferential surface . . . formed of a nonmetallic material" (emphasis added by applicants) and that there is no roller in Guaraldi with a circumferential surface structure. Thus, Guaraldi cannot be said to disclose or suggest that the circumferential surface of the distributor roller 20 is of a nonmetallic material. The function of the circumferential surface structure and the advantages connected therewith are outlined on page 5, lines 15 to 22, and page 6, lines 14 to 19, as well as on page 16, lines 1 to 9, and page 20, lines 12 to 20, of the specification of the instant application, and are as follows:

Due to the filigree machined structure of the slip-roller surface in the case of the slip roller according to the invention, and due to the properties of the material selected for the surface thereof, the shear forces that act upon the slip roller are advantageously reduced or compensated for and are virtually independent of the pressure. Consequently, the stability requirements for the mounting of the slip roller, and the sensitivity thereof to adjustment, are reduced.

Due to the filigree machined structure of the vibrator roller surface, and due to the properties of the material selected for the surface, the starting jolt is advantageously reduced, so that it cannot be propagated into the drive gear train of the printing unit containing the vibrator roller, and therefore cannot lead to ghosting faults.

In addition, from the surface structure 29, there results the beneficial effect that the printing ink or printing-ink/dampening-solution emulsion held from time to time between the elevated structure elements 30 has the effect of a partial thickening of the film layer in the resilient nip, referred to as the press nip 21, due to which the force 32, here the shear force 32, is not only compensated for but is also reduced. As a result of the partial thickening of the liquid film, the latter may be sheared more easily.

In the third embodiment of the surface structure 29, which is shown in Fig. 7, a resultant advantage also is that the liquid film has a partially increased thickness in the press nip 21. As viewed over the length of the press nip 21, the thickness of the liquid film fluctuates between an upper and a lower limit, or the thickness of the liquid film alternately increases and decreases. It is therefore unnecessary for thin ink layers or emulsion layers to be sheared over the entire length of the press nip 21, and the force 32 is reduced.

The person of skill in the art knows that there are two types of rollers: unstructured rollers (so-called smooth rollers)

and structured rollers. It clearly results from each respective claim of the instant application that the roller mentioned is a roller of the latter type and not of the kind mentioned in Guaraldi.

With regard to claim 8, the Examiner maintains that the feature of having "an arithmetical average height of the surface structure [being] at least 12 microns, is merely a design choice for controlling the amount of liquid to be transferred to the other rollers during printing." It is respectfully submitted that this range is not merely a design choice. Rather, the range refers to a surface structure with very specific structured elements relating to their form and shape. These structured elements have the shape of a slat, ridge, or wedge, for example. See page 16, lines 11 to 13, and FIGS. 3 and 4 of the instant application.

Based upon the dissimilarity of the ductor roller of the instant application and the vibrator roller 20 of Guaraldi, the following arguments are directed to the Examiner's comparison between the roller 16 in Guaraldi and the slip roller in claims 1, 10, 15, and 16 of the instant application.

Even though Guaraldi discloses that the circumferential surface of the slip roller 16 is made of rubber and, thus,

from a nonmetallic material (see col. 3, lines 52 to 54, therein), nowhere does Guaraldi suggest, let alone disclose, providing the surface structure on that circumferential surface, a characteristic explicitly set forth in claims 1, 10, 15, and 16 of the instant application. Specifically, Guaraldi's roller 16 does not have any surface structure, let alone the surface structure as set forth in the claims of the instant application.

It is self-evident that the Guaraldi slip roller 16 has no surface structure and one having ordinary skill in the art would know that the Guaraldi slip roller 16 has a smooth unstructured circumferential surface. Further, Guaraldi does not teach towards providing such a surface structure. Due to the fact that Guaraldi contains no information regarding the structuring or non-structuring of the roller circumferential surface, and, in light of the fact that Guaraldi provides that the "outer surface of the slip roller 16 as is conventional is made of a rubber material," one having ordinary skill in the art would be directed towards providing a conventional embodiment of the slip roller both with regard to the material and to the geometry of the circumferential surface. Guaraldi at col. 3, lines 52 to 54 (emphasis added by applicants). having ordinary skill in the art knows that conventional slip rollers are embodied with a smooth circumferential surface; in

other words, they have an <u>un</u>structured circumferential surface. Accordingly, Guaraldi actually teaches away from providing the surface structure of the roller according to claims 1, 10, 15, and 16 of the instant application.

The inventors of the instant application were the first to have the idea to provide the circumferential surface of such a slip roller with a structure in order to achieve certain advantages set forth, for example, on page 5, lines 15 to 22, and page 15, line 13, to page 16, line 9, of the specification of the instant application.

The shear forces in the prior art slip rollers and in Guaraldi's slip roller 16 are greatly dependent on the set pressure in the slip gap. See page 5, lines 9 to 11, of the specification of the instant application. Even though it was already known to Guaraldi that the amount of the damping solution transferred to the slip roller 16 can be changed by a variation of the roller compression (see Guaraldi at col. 5, lines 5 to 15), Guaraldi did not yet recognize that with a suitable structure of the circumferential surface of the roller compression quasi-independent shear forces can be achieved, as in the case of the invention of the instant application. See page 5, lines 18 to 20, of the specification of the instant application.

Clearly, Guaraldi does not disclose or suggest a roller as recited in claims 1, 10, 15, or 16 of the instant application. Claims 1, 10, 15, and 16 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claim 10.

Claims 17 to 22 have been added. Each of these claims finds support from claims 1 to 16. Accordingly, no new matter has been added. The arguments set forth with respect to claims 1 to 16 are equally applicable to claims 17 to 22 and are incorporated by reference for these new claims. It is accordingly believed that Guaraldi neither discloses nor suggests claims 17 to 22.

On pages 3 and 4 of the above-identified Office action, claims 4 to 9 and 11 to 14 have been rejected as being obvious over Guaraldi in view of Buchwald (U.S. 5,813,961) under 35 U.S.C. § 103.

Insofar as claim 10 is allowable, and due to the fact that claims 4 through 9 and 11 through 14 ultimately depend upon claim 10, the rejections of these claims in on pages 3 to 4 of the above-identified final Office action are now moot.

Nonetheless, a critical step in analyzing the patentability of claims pursuant to 35 U.S.C. § 103 is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. See <a href="In re Dembiczak">In re Dembiczak</a>, 175 F.3d 994, 999, 50 USPQ2d 1614,1617 (Fed. Cir. 1999). Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher."

Id. (quoting W.L. Gore & Assocs. Inc. v. Garlock, Inc., 721

F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983)).

Most if not all inventions arise from a combination of old elements. See In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453,1457 (Fed. Cir. 1998). Thus, every element of a claimed invention may often be found in the prior art. See id. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. See id. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion, or teaching of the desirability of making the specific

combination that was made by the appellant. See <u>In re Dance</u>, 160 F.3d 1339, 1343, 48 USPQ2d 163.5, 1637 (Fed. Cir. 1998); <u>In re Gordon</u>, 733 F.2d 900, 902, 221 USPQ 1125,1127 (Fed. Cir. 1984).

The motivation, suggestion, or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. See Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617. In addition, the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. See WMS Gaming, Inc. v. International Game Tech., 184 F.3d 1339, 1355, 51 USPQ2d 1385, 1397 (Fed. Cir. 1999). The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981) (and cases cited therein). Whether an examiner relies on an express or an implicit showing, the Examiner must provide particular findings related See Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617. Broad conclusory statements standing alone are not "evidence." Id. When an examiner relies on general knowledge to negate patentability, that knowledge must be articulated and placed

on the record. See <u>In re Lee</u>, 277 F-3d 1338, 1342-45, 61 USPQ2d 1430, 1433-35 (Fed. Cir. 2002).

Upon evaluation of the Office action, it is respectfully believed that the evidence adduced is insufficient to establish a *prima facie* case of obviousness with respect to the rejected claims.

Applicants respectfully believe that any teaching, suggestion, or incentive possibly derived from the prior art is only present with <a href="https://doi.org/10.1001/j.nlm.new.org/">https://doi.org/<a href="https://doi.org/">https://doi.org/<a href="https://doi.org/">https://doi.org

The arguments set forth with respect to claims 1 to 16 in response to the Section 103 rejection are equally applicable to claims 17 to 22 and are incorporated by reference for these new claims. It is accordingly believed that the combination

of Guaraldi and Buchwald do not suggest any of claims 17 to 22.

In view of the foregoing, reconsideration and allowance of claims 1 to 22 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made.

The fee for two (2) additional claims in excess of twenty (20) in the amount of \$36.00 and the fee for two (2) additional independent claims in excess of three (3) in the amount of \$172.00 in accordance with Section 1.17 are enclosed herewith.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

For Molicants

Gregory L. Mayback Reg. No. 40,719

February 17, 2004

Lerner and Greenberg, P.A. Post Office Box 2480 Hollywood, FL 33022-2480

Tel: (954) 925-1100 Fax: (954) 925-1101